



**Science Grade 5
Scoring Guide for
Released Item 16
Locating Elephants
Fall 2007**



ANSWER THE FOLLOWING CONSTRUCTED-RESPONSE ITEM IN YOUR ANSWER DOCUMENT.

**16 Constructed-Response
(3 points)**

In some places, scientists locate elephants by using an electronic tracking device. This method involves putting a collar containing the device on the elephant so that the animal's position can be tracked.

- Describe two benefits of using electronic tracking technology on the elephants.
- Describe one risk to elephants if this system is used.

NOTHING WRITTEN IN THIS TEST BOOKLET WILL BE SCORED.

Science Rubric for Locating Elephants**Bullet 1 (0-2 points)**

Student states 2 beneficial reasons for tracking. (1 point per reason up to 2 points)

- Continually knowing the location of the elephant
- Knowing if an individual elephant has is injured and needs help (e.g., stopped moving, dead)
- Enable remote tracking (not required to maintain visual contact)
- Knowing if an elephant travels alone or in groups

Bullet 2: (0-1 point)

Student states a reason how the electronic tracking system puts the elephant at risk.

- Poachers could use the signal from the elephant's collar to target an elephant's location.
- The collar carrying the tracking device could become entangled in the underbrush which would be inconvenient for the elephant.
- Physical distress is acceptable, emotional distress is not acceptable

Anchor Paper 1 – Score Point 3

Good

1. We could find more elephants.

2. We could do more tests to know what they're doing.

Bad

1. The collar could get stuck and choke the elephants.

2. Elephants could become extinct.

**Anchor Paper 1
Score Point 3**

The student correctly describes a benefit of using electronic tracking technology (*find more elephants*). Locating elephants using the tracking collar is considered a benefit. The student correctly describes a second benefit of using electronic tracking technology (*do more tests*). Study of specific behavior of the elephants is considered a benefit. The student correctly describes a risk to the elephants if this system is used (*The collar could get stuck and choke the elephants*). That the collar can cause physical distress is considered a risk to the elephants.

Anchor Paper 2 – Score Point 2

Two good things about this is, that maybe scientists can help the elephants by feeding them. Another is that the scientist finally know where the elephants are.

One risk is that the collar that they put on the elephants could hurt them, like shock them.

**Anchor Paper 2
Score Point 2**

The student correctly describes a benefit of using electronic tracking technology (*scientists finally know where the elephants are*). Locating elephants using the tracking collar is considered a benefit. The student correctly describes a risk to the elephants if this system is used (*The collar they put on the elephants could hurt them, like shock them*). That the collar can cause physical distress is considered a risk to the elephants. The statement, "*scientists can help the elephants by feeding them,*" is not a benefit of using electronic tracking technology. The long term care of elephants is not the purpose of scientific study using the tracking collar.

Anchor Paper 3 – Score Point 1

One benefit of using an electronic tracking technology on the elephants would be, if they get attacked what if the animal that is attacking rips it off. Another one is if you put it around their feet if they go to scratch themselves they could make it fall off. A risk for elephants would be if something goes wrong and it blows up the elephants would get hurt.

**Anchor Paper 3
Score Point 1**

The student correctly describes a risk to the elephants if this system is used (*the elephants would get hurt*). That the collar can cause physical distress is considered a risk to the elephants.

Anchor Paper 4 – Score Point 0

If they want to study elephants they could track them by putting the tracking collar on it.

The elephants could be dieing and they could save it by putting the collar on it.

• The elephant could be scared.

**Anchor Paper 4
Score Point 0**

The statement, "If they want to study elephants they could track them by putting the tracking collar" does not describe a specific area of study and is not considered a benefit of using electronic tracking technology. That the elephant is tracked is given in the prompt and is not considered a benefit. The statement, "The elephants could be dieing and they could save it by putting the collar on it" is not considered a benefit of using electronic tracking technology. The collar is not a medical device. The statement, "the elephant could be scared" is not considered a risk to the elephants if this system is used. The electronic tracking collar does not cause emotional distress.

Anchor Paper 15 – Score Point 0

a risk to elephants is if this system is used
something might go wrong and the scientists
wouldn't be able to track the elephants anymore

**Anchor Paper 15
Score Point 0**

The statement, “*something might go wrong and the scientists wouldn't be able to track the elephants anymore*” is a risk for those doing the research, not the elephant, and is not considered a risk to the elephants if this system is used.